

Appl. No. 10/600,393
Reply to Office Action of March 25, 2005

Attorney Docket No. 2002-0066 / 24061.461
Customer No. 42717

REMARKS

Claim 34 has been canceled, and Claims 20-22, 29 and 31 have been amended. Claims 1-33 are present in the application. In view of the foregoing amendments, and in view of the following remarks, Applicants respectfully request reconsideration.

Allowed Claims

Noted with appreciation is the indication in the Office Action that Claims 1-19 have been allowed.

Comment on Statement of Reasons for Allowance

In lines 11-15 on page 12, the Office Action sets forth a statement by the Examiner of reasons for allowing Claims 1-19. Applicants agree that Claims 1-19 are allowable. However, Applicants do not agree in all respects with the statement of reasons for allowance. For example, Applicants respectfully submit that the stated reasons should not be interpreted to mean that there are no other reasons which separately and independently support the allowability of independent Claim 1 and/or dependent Claims 2-19.

Gonzalez U.S. Patent No. 6,294,421

Applicants previously filed an Information Disclosure Statement (IDS) on February 12, 2004, and another IDS on December 29, 2004. These two IDSs each included a Form PTO-1449 that cited Gonzalez U.S. Patent No. 6,294,421. The present Office Action is accompanied by an initialed copy of the PTO-1449 forms from these two IDSs. However, on each of these PTO-1449 forms, the Examiner has crossed off the Gonzalez '421 patent. In paragraph 2 on page 2 of the Office Action, the Examiner states that the Gonzalez '421 patent has been withdrawn by the PTO, and therefore was not considered.

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On the one hand, the fact that the Gonzalez patent has been withdrawn by the PTO as a patent does not absolve the Examiner of the obligation to consider it on the merits. In particular, the Gonzalez '421 patent did formally issue, and Applicants have a copy of it. Consequently, it was a publicly available document that still constitutes a printed publication under 35 U.S.C. §102(b). Since Applicants have gone to the effort and expense to formally cite it in compliance with the duty of disclosure, Applicants are entitled to have it considered on the merits.

On the other hand, Applicants note that what apparently happened is that the PTO issued two patents from a single patent application, namely the Gonzalez '421 patent, and also Gonzalez U.S. Patent No. 6,383,861 (which is of record in the present application). The Examiner is currently using the Gonzalez '861 patent to reject claims (as discussed later). Consequently, since the disclosures of the Gonzalez '421 and '861 patents are effectively identical, and since the Examiner has clearly considered the disclosure of the Gonzalez '861 patent, Applicants have decided to forego raising an objection to the fact that the Gonzalez '421 patent was not properly considered on the merits. The present explanation of this situation will help to avoid any possible future confusion, by making it clear in the record that the Examiner's consideration of the disclosure of the Gonzalez '861 patent means that the disclosure of the Gonzalez '421 patent was also effectively considered, even though the Examiner crossed off the '421 patent on each Form PTO-1449, and stated that the disclosure of the '421 patent had not been considered.

Independent Claim 20

Independent Claim 20 recited "A method . . . featuring a hydrofluoric (HF), pre-clean procedure performed prior to formation of each gate insulator layer". The foregoing amendments to Claim 20 replace this single limitation reciting multiple pre-clean procedures with two separate but equivalent limitations that each recite a respective pre-clean procedure performed just before formation of a respective dielectric layer. In particular, Claim 20 now recites:

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... performing a first hydrofluoric (HF) pre-clean procedure;
forming a first dielectric layer over said silicon containing
substrate; ...
performing a second hydrofluoric (HF) pre-clean
procedure; and
performing an oxidation procedure to form a second
dielectric gate insulator layer, ...

This change improves the form of Claim 20, but does not add any limitation that was not already present in Claim 20, and does not modify the intended scope of Claim 20.

Independent Claim 20 stands rejected under 35 U.S.C. §102 as anticipated by Gonzalez U.S. Patent No. 6,383,861. This ground of rejection is respectfully traversed, for the following reasons. The PTO specifies in MPEP §2131 that, in order for a reference to anticipate a claim under §102, the reference must teach each and every element recited in the claim. The rationale underlying the §102 rejection of Claim 20 is set forth in the paragraph that bridges pages 2-3 of the Office Action. However, this paragraph fails to discuss whether Gonzalez discloses any cleaning procedure. Applicants have studied the Gonzalez patent, and respectfully submit that Gonzalez does not disclose a hydrofluoric (HF) cleaning procedure that would meet the recitation in Claim 20 of "performing a first hydrofluoric (HF) pre-clean procedure". Gonzalez therefore fails to disclose each and every limitation recited in Applicants' Claim 20, and thus does not anticipate Claim 20 under §102. Accordingly, it is respectfully submitted that Claim 20 is allowable over the Gonzalez '861 patent, and notice to that effect is respectfully solicited.

Dependent Claims

Claims 21-33 depend from Claim 20, and are also believed to be distinct from the art of record, for example for the same reasons discussed above with respect to Claim 20.

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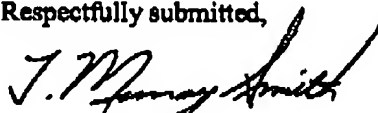
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Conclusion

Based on the foregoing, it is respectfully submitted that all of the pending claims are fully allowable, and favorable reconsideration of this application is therefore respectfully requested. If the Examiner believes that examination of the present application may be advanced in any way by a telephone conference, the Examiner is invited to telephone the undersigned attorney at 972-739-8647.

Although Applicants believe that no fee is due in association with the filing of this Response, the Commissioner is hereby authorized to charge any additional fee required by this paper, or to credit any overpayment, to Deposit Account No. 08-1394 of Haynes and Boone LLP.

Respectfully submitted,



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Enclosure: None

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